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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,966	09/10/1999	SEIJI TAKEUCHI	35.G2449	3549
5514	7590	03/31/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			ROBINSON, MARK A	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2872

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/393,966	Applicant(s) TAKEUCHI ET AL.	
	Examiner Mark A. Robinson	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 71,73-75 and 77-89 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 71,73-75 and 77-88 is/are rejected.
- 7) ☒ Claim(s) 89 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/19/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 79 and 86 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris (US 5208700).

Harris shows a diffractive optical element including an effective area(12), a surrounding peripheral area(24), a light

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shielding member composed of an epoxy light shielding ink (28-- see also col. 3 lines 55+ which teaches this member to be light shielding), and a holding frame(16), wherein the light shielding member includes an alignment mark at a predetermined position so as to center the effective area in the holding frame (see the paragraph bridging col. 3-4).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 75,77,78,80,81,87 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US 5208700).

Regarding claim 75, Harris shows a diffractive optical element including an effective area(12), a surrounding peripheral area(24), a light shielding member (28--see also col. 3 lines 55+ which teaches this member to be light shielding), and a holding frame(16), wherein the light shielding member includes an alignment mark at a predetermined position so as to

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center the effective area in the holding frame (see the paragraph bridging col. 3-4). Harris does not teach the light shielding member to be composed of one of the listed materials. However, light shielding members including at least one of the listed materials are well known in the art and would have been obvious to the ordinarily skilled artisan at the time of invention as art-recognized equivalents to the materials used by Harris for the purpose of shielding unwanted light. As applicant has not traversed the examiner's statement of what is well known, the object of this statement is held to be admitted prior art.

Regarding claims 77,78,80,81,87 and 88, although not taught by Harris, exposure devices and methods as claimed are well known in the art. It would have been obvious to the ordinarily skilled artisan at the time of invention to use a known prior art exposure device or method with the claimed diffraction element in order to enable manufacture of a semi-conductor wafer or apparatus. As applicant has not traversed the examiner's statement of what is well known, the object of this statement is held to be admitted prior art.

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6. Claims 71,73,74,82-85 rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US 5208700) in view of Sawaki (US 5648874).

Regarding claims 71 and 82, Harris shows a diffractive optical element including an effective area(12), a surrounding peripheral area(24), a light shielding member (28--see also col. 3 lines 55+ which teaches this member to be light shielding), and a holding frame(16), wherein the light shielding member includes an alignment mark at a predetermined position so as to center the effective area in the holding frame (see the paragraph bridging col. 3-4). Harris does not teach the light shielding member to be composed of the listed materials. However, as discussed previously Sawaki teaches a light shielding member to be composed of these materials (note item 33c, etc.). Use of Sawaki's light shielding materials would have been obvious to the ordinarily skilled artisan at the time of invention as art-recognized equivalents to the materials used by Harris for the purpose of shielding unwanted light. Claim 83 is directed to the intended use of the element and has not been given significant patentable weight.

Regarding claims 73,74,84 and 85, although not taught by Harris, exposure devices and methods as claimed are well known in the art. It would have been obvious to the ordinarily

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skilled artisan at the time of invention to use a known prior art exposure device or method with the claimed diffraction element in order to enable manufacture of a semi-conductor wafer or apparatus. As applicant has not traversed the examiner's statement of what is well known, the object of this statement is held to be admitted prior art.

Allowable Subject Matter

7. Claim 89 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest the specific method for manufacturing the specific diffractive element as set forth in the claimed combination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (571) 272-2319.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be

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reached at (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR

3/29/05


MARK A. ROBINSON
PRIMARY EXAMINER